

Appendix III: Proposed Actions By Sector

Actions that involve more than one sector are listed under each sector:

G=City government
B=Business community
I=Institutions
R=Residents

CITY GOVERNMENT

Energy

Short-term

- Establish a municipal working group on energy management with representatives from the public works, electrical, school, library, community development, and other departments to track energy use in City buildings. Based on the data, set a municipal goal on reducing energy use. [G]
- Replace incandescent traffic signals with light emitting diode (LED) lights, which are 80 to 90% more efficient and rated to last 100,000 hours compared to 8,000 hours for incandescents. Take advantage of available utility rebates. [G]
- Recruit businesses and organizations into the federal Energy Star program with the goal of reducing energy use. Utilize pledges, peer exchanges, and public recognition programs to sustain involvement. [G,B,I]
- Work with local stores to promote Energy Star products and educate consumers about the Energy Star label. [G,B]
- Organize “green teams” to promote household practices that reduce GHG emissions. [G,R]
- Organize “green teams” within City departments to promote more sustainable practices in municipal operations. [G]
- Publicize utility energy efficiency programs. [B,G]
- Promote the use of ESCOs and performance contracting, where appropriate, to facilitate energy efficiency improvements when initial financial costs are a barrier. [B,I,G]
- Implement a City purchasing policy favoring Energy Star products. [G]
- Explore options to increase efficiency of City street lighting. [G]
- Assess condition of existing buildings to understand the inefficiencies prevalent in the building stock and design appropriate programs to increase efficiency. [G]

- Evaluate possible green power purchasing options. [G,B,I,R]
- Join Solar Boston, a partnership of the U.S. Department of Energy, solar energy businesses, and local community organizations, to promote and facilitate solar energy installations. [G]
- Pursue funding of solar energy installations through the Massachusetts Renewable Energy Trust. [B,G,I]

Medium-term

- Implement an energy management program for municipal facilities to evaluate use patterns, identify opportunities for energy efficiency improvements and renewable energy installations, pursue utility and other outside funding sources, manage contract work, and evaluate options for the energy supply. Consider establishment of an energy management position. [G]
- Install solar energy and other renewable energy systems on City facilities. [G]
- Integrate energy efficiency upgrades and renewable energy installations into the City capital planning process. [G]
- Support state action including a strong Renewable Portfolio Standard and implementation of the Clean Air Act regulations on older power plants. [G,R]
- Develop funding sources for solar energy installations in partnership with NSTAR to address system bottlenecks and RPS requirements. [B,G]
- Develop one or more projects with schools to install solar energy systems and conduct associated classroom activities. [G]
- Extend the steam distribution system to the North Point area, which is slated for development. [B,G]

Long-term

- Support federal action on lowering power plant emissions of CO₂ and conventional air pollutants. [G,R]

Transportation

Short-term

- Expand City outreach to businesses to increase participation in voluntary PTDM programs. [G,B]
- Expand incentives and increase participation in the City TDM program for municipal employees. [G]
- Expand the pedestrian program to further improve intersections and increase year-round sidewalk maintenance, provide public restroom access and benches, and make aesthetic improvements, e.g., trees, flowers, buildings with windows, fences that are low and transparent. [G,B,I,R]
- Install additional bicycle parking and look for new opportunities to install bicycle lanes or guidelines and improve intersections for cyclists. [G]
- Install signs with schedule and route information at bus stops in Cambridge. [G]
- Install shelters or benches at busy bus stops where there is room on the sidewalk. [G]
- Investigate traffic measures to expedite bus travel. [G]
- Continue to develop and distribute promotional material and hold promotional events. [G]
- Continue the work of Cambridge Walks, including Walk your Child to School Day. [G,B]
- Work with community groups to promote walking and biking for health. [G,R]
- Adopt a City green fleets policy that incorporates energy efficiency criteria for acquiring municipal vehicles, including sizing of vehicles appropriate to their tasks, giving preferences to alternative fuels and hybrid vehicles where possible and promotion of using the smallest vehicle necessary for jobs (including City bikes). [G]
- Establish a municipal work group to coordinate implementation of alternative fuel vehicle acquisition and infrastructure installation. [G]
- Provide a program on driving and maintenance practices that reduce fuel use and emissions for employees who use City vehicles and for the community. [G]
- Publicize the health and environmental costs of motor vehicle emissions. [G,I]
- Reduce the number of nonresident citywide stickers. [G]

Short and medium-term

- Lobby for additional federal and state transit funding. [G,B,I,R]
- Work with other communities to create new MBTA services, including an Orange Line stop at Assembly Square, Somerville; a Green Line extension from Lechmere to Medford, and the Urban Ring line. [G,B,I,R]
- Lobby for low-emissions buses. [G,B,I,R]
- Encourage state and federal elected officials to shift federal funds from high ways to transit. [G,B,I,R]

Medium-term

- Monitor results of PTDM program and investigate increasing the requirements. [G]
- Investigate lowering further the minimum parking standards for new development, especially near T stations. [G]
- Create and improve off-road bicycle and pedestrian paths, e.g., a new path along the Grand Junction railroad right-of-way, improvements along the Charles River; and paths connecting to Belmont and Watertown. [G]
- Establish a “walking bus” program in 3 schools. [G,R]
- Undertake an anti-idling campaign, with education and enforcement. [G,B,R]
- Work with the city’s congressional delegation to advocate for higher CAFE standards. [G,R]
- Work with state agencies to more closely tie vehicle insurance costs to vehicle miles traveled. [G,R]
- Develop stickers on tire pressure for optimum energy efficiency to install at service station air pumps. [G,B]

Long-term

- Investigate possible shared-use very low-speed neighborhood streets. [G]
- Establish infrastructure for alternative fuel vehicles, including a CNG fueling station for City vehicles; free public access refueling stations, partly solar-powered, for electric vehicles; and reserved spaces for zero emission vehicles and low emission vehicles in municipal garages and parking lots. [G, B]
- Install emission controls on heavy-duty City trucks and construction vehicles; investigate requiring emissions mechanicals on trucks doing business with the City. [G]

- Investigate possible programs to encourage taxis to switch to CNG. [G,B]
- Link parking sticker fees to engine size and put a cap on the tonnage of vehicles eligible for residential parking permits. Increase fees for second, third cars. [G]
- Establish a parking maximum for residential units. [G]
- Study possible creation of neighborhood-zoned parking. [G]
- Encourage federal and state officials to begin planning an interstate transportation system that does not include large trucks on roadways other than limited access highways. [G,B,I,R]

Land Use, Buildings, and Vegetation Management

Short-term

- Through zoning, continue to encourage pedestrian-scaled mixed-use development, with residential infill throughout the city. Strengthen orientation toward denser development near public transportation. [G]
- Provide developers, citizens, and City staff with information to help them apply LEED standards. [G]
- Design and construct durable City buildings that use LEED principles and have flexible re-use options. [G,B,I,R]
- Conduct consistent open space review during the permitting process for development projects to incorporate public open space into project design. [G]
- Provide incentives for planting trees and creating additional green space open to the public as part of new development and major renovations. [G]
- Carry out the recommendations in the Green Ribbon Report. [G]
- Provide developers and property owners with information about using green roofs or high reflectance roofs on buildings and other reflectance and shading techniques. [G]
- Use GIS or other computer imaging, such as the CITYgreen software developed by American Forests, to accurately determine current canopy cover, assess environmental benefits, and plan plantings. [G]
- Increase public education efforts on stormwater management practices, especially those that complement GHG emission reductions. [G]

Medium-term

- Develop green standards for renovation of City-owned properties. Utilize the City energy management workgroup to coordinate department implementation. [G]
- Strengthen zoning incentives to include LEED in project review and Planned Unit Development (PUD) processes. [G]
- Reuse materials from existing structures during renovation or redevelopment projects (See LEED Materials Credit 1). [G,I,B,R]
- Work with legislators and other public officials toward creating a regional land use plan with teeth. [G,R,I,B]
- Develop and carry out policies and programs to maximize the tree canopy cover, with special attention to parking lots and other heat-absorbing locations, and to shading air-conditioning units. This should include attention to soils, water retention, and appropriate species. [G,B,I,R]
- Reuse materials from existing structures during renovation or redevelopment projects (See LEED Materials Credit 1). [G,I,B,R]
- Provide incentives for new construction and renovations to meet LEED standards for reflectance and shading. [G]
- Incorporate LEED standards for reflectance and shading in all City and private parking lots and in new construction and major renovations. [G,B,I,R]

Waste Management

Short-term

- Implement a waste prevention program for City government. [G]
- Carry out projects to increase participation in existing recycling programs using community-based social marketing techniques, starting with a pilot project. (See Section 8 for a description of community-based social marketing.) [G]
- Facilitate construction and demolition waste recycling. Help contractors prepare for 2003 state ban on disposal of construction and demolition waste by requiring a construction and demolition debris recycling plan as a condition of receiving a building permit. [G]

Medium-term

- Conduct waste composition studies every two years to develop information about which new portions of the waste stream to target for recycling or reduction and to evaluate the success of the current program. Include all sectors of the community across all seasons of the year. [G]
- Expand electronics recycling to include printers and other computer peripherals, as well as old phones, VCRs, stereos, and other electronic equipment. [G,B]

Medium and Long-term

- Promote waste prevention measures in the commercial and residential sectors. [B,I,G]

Long-term

- Develop a program to ensure that commercial waste paper is being recycled. The program should be based on a monitoring program and application of the Recycling Ordinance requirements. [G,B]
- Facilitate commercial food waste collection in anticipation of a state ban on food waste disposal that should go into effect soon under the Solid Waste Master Plan. Identify appropriate disposal facilities. [G,B,I]
- Conduct a thorough composition study of the residential waste stream to assess the feasibility of a residential food waste collection program. Picking up food waste, yard waste, and cardboard in the same packer trucks should be considered. [G]
- Develop a program to pick up used clothing for recycling at the curb. [G]
- Reevaluate the City's system for tracking recycled and non-recycled paper and plastic purchases to ensure accurate recording of the quantities purchased and set goals for increasing the percentage. Work with the school department to accomplish the same steps. [G]
- Work with stores to develop and use point-of-sale reminders to customers to purchase recycled products. [G,B]

BUSINESS SECTOR

Energy

Short-term

- Take advantage of available utility rebates. Join the federal Energy Star program with the goal of reducing energy use. Take advantage of pledges, peer exchanges, and public recognition programs to sustain involvement. [G,B,I]
- Promote Energy Star products in local stores and educate consumers about the Energy Star label. [G,B]
- Publicize utility energy efficiency programs. [B,G]
- Use ESCOs and performance contracting, where appropriate, to facilitate energy efficiency improvements when initial financial costs are a barrier. [B,I,G]
- Evaluate feasibility of purchasing green power. [G,B,I,R]
- Install renewable energy systems and fuel cells. [G,B,I,R]
- Pursue funding of solar energy installations through the Massachusetts Renewable Energy Trust. [B,G,I]

Medium-term

- Connect to the East Cambridge steam system and increase annual steam use by 200 million pounds. [B]
- Extend the steam distribution system to the North Point area, which is slated for development. [B,G]
- Develop funding sources for solar energy installations in partnership with NSTAR to address system bottlenecks and RPS requirements. [B,G]

Transportation

Short-term

- Undertake or continue aggressive TDM measures and monitor the results. [G,B,I]
- Expand the pedestrian program to further improve intersections and increase year-round sidewalk maintenance, provide public restroom access and benches, and make aesthetic improvements, e.g., trees, flowers, buildings with windows, fences that are low and transparent. [G,B,I,R]

- Promote the work of Cambridge Walks, including Walk your Child to School Day. [G,B]
- When giving directions to businesses, events, and institutions, include directions by T. [G,B,I]

Short and medium-term

- Lobby for additional federal and state transit funding. [G,B,I,R]
- Work with other communities to create new MBTA services, including an Orange Line stop at Assembly Square, Somerville; a Green Line extension from Lechmere to Medford, and the Urban Ring line. [G,B,I,R]
- Lobby for low-emissions buses. [G,B,I,R]
- Encourage state and federal elected officials to shift federal funds from high ways to transit. [G,B,I,R]

Medium-term

- Continue aggressive TDM measures and monitoring. [G,I,B]
- Consider creating a bicycle commuter station. [B]
- Publicize proximity to transit as a reason to shop in local stores, distribute free subway tokens to customers where parking vouchers are provided, and offer discounts to cyclists. [B]
- Make sure vehicles engaged in business do not idle unnecessarily. [G,B,I]
- Develop stickers on tire pressure for optimum energy efficiency to install at service station air pumps. [G,B]

Long-term

- Examine the feasibility and logistics of establishing a citywide bicycle-sharing program. [B]
- Establish car-free celebrations in Cambridge. [B,R]
- Establish infrastructure for alternative fuel vehicles, including a CNG fueling station; free public access refueling stations, partly solar-powered, for electric vehicles; and reserved spaces for zero emissions vehicles and low emission vehicles in garages and parking lots. [G,B]
- Investigate possible programs to encourage taxis to switch to CNG. [G,B]
- Encourage federal and state officials to begin planning an interstate transportation system that does not include large trucks on roadways other than limited access highways. [G,B,I,R]

Land Use, Buildings, and Vegetation Management

Short-term

- Design and construct durable buildings based on LEED principles with flexible re-use options. [G,I,B,R]

Medium-term

- Create appealing small-scale public gathering spaces with well-adapted vegetation as part of development and redevelopment projects. [B,I]
- Reuse materials from existing structures during renovation or redevelopment projects (See LEED Materials Credit 1). [G,I,B,R]
- Work with legislators and other public officials toward creating a regional land use plan with teeth. [G,R,I,B]
- Develop and carry out policies and programs to maximize the tree canopy cover, with special attention to parking lots and other heat-absorbing locations, and to shading air-conditioning units. This should include attention to soils, water retention, and appropriate species. [G,B,I,R]

Medium and long-term

- Incorporate LEED standards for reflectance and shading in all parking lots and in new construction and major renovations. [G,B,I,R]

Waste Management

Medium-term

- Work with the City to develop and carry out a program to ensure that commercial waste paper is being recycled. [G,B]
- Work with the City to facilitate commercial food waste collection in anticipation of a state ban on food waste disposal that should go into effect soon under the Solid Waste Master Plan. [G,B,I]
- Work with the City to develop and use point-of-sale reminders to retail customers to purchase recycled products. [G,B]

Medium and long-term

- Promote and carry out waste prevention measures. [B,I,G,R]
- Expand electronics recycling to include printers and other computer peripherals, as well as old phones, VCRs, stereos, and other electronic equipment. [G,B]

INSTITUTIONS

Energy

Short-term

- Take advantage of available utility rebates. Take part in the federal Energy Star program with the goal of reducing energy use. Take advantage of pledges, peer exchanges, and public recognition programs to sustain involvement. [G,B,I]
- Use ESCOs and performance contracting, where appropriate, to facilitate energy efficiency improvements when initial financial costs are a barrier. [B,I,G]
- Look for green power purchasing options. [G,B,I,R]
- Install renewable energy systems and fuel cells. [G,B,I,R]
- Pursue funding of solar energy installations through the Massachusetts Renewable Energy Trust. [B,G,I]

Transportation

Short-term

- Undertake or continue aggressive TDM measures and monitor the results. [G,B,I]
- Expand the pedestrian program to further improve intersections and increase year-round sidewalk maintenance, provide public restroom access and benches, and make aesthetic improvements, e.g., trees, flowers, buildings with windows, fences that are low and transparent. [G,B,I,R]
- When giving directions to events, include directions by T. [G,B,I]
- Publicize the health and environmental costs of motor vehicle emissions. [G,I]

Medium-term

- Make sure vehicles engaged in university business do not idle unnecessarily. [G,B,I]

Short and medium-term

- Lobby for additional federal and state transit funding. [G,B,I,R]
- Work with other communities to create new MBTA services, including an Orange Line stop at Assembly Square, Somerville; a Green Line extension from Lechmere to Medford; and the Urban Ring line. [G,B,I,R]

- Lobby for low-emissions buses. [G,B,I,R]
- Encourage state and federal elected officials to shift federal funds from high ways to transit. [G,B,I,R]

Long-term

- Encourage federal and state officials to begin planning an interstate transportation system that does not include large trucks on roadways other than limited access highways. [G,B,I,R]

Land Use, Buildings, and Vegetation Management

Short-term

- Design and construct durable buildings that incorporate LEED principles and have flexible re-use options. [G,I,B,R]

Medium-term

- Create appealing small-scale public gathering spaces with well-adapted vegetation as part of development and redevelopment projects. [B,I]
- Reuse materials from existing structures during renovation or redevelopment projects (See LEED Materials Credit 1). [G,I,B,R]
- Work with legislators and other public officials toward creating a regional land use plan with teeth. [G,R,I,B]
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- Develop and carry out policies and programs to maximize the tree canopy cover; with special attention to parking lots and other heat-absorbing locations, and to shading air-conditioning units. This should include attention to soils, water retention, and appropriate species. [G,B,I,R]
- Incorporate LEED standards for reflectance and shading in parking lots and in new construction and major renovations. [G,B,I,R]

Waste Management

Medium-term

- Implement and promote waste prevention measures. [B,I,G]
- Undertake or continue commercial food waste collection in preparation for a state ban on food waste disposal that should go into effect soon under the Solid Waste Master Plan. [G,B,I]

RESIDENTS

Energy

Short-term

- Organize “green teams” to promote household practices that reduce GHG emissions. [R,G]
- Support state action including a strong Renewable Portfolio Standard and implementation of the Clean Air Act regulations on older power plants. [G,R]
- Support federal action on lowering power plant emissions of CO₂ and conventional air pollutants. [G,R]
- Participate in utility programs to reduce energy use. Take advantage of available utility rebates. [G,B,I,R]

Medium-term

- Take advantage of green power purchasing options where feasible. [G, B,I,R]
- Install renewable energy systems and fuel cells. [G,B,I,R]

Transportation

Short-term

- If driving alone to work, discuss with employer ways to make it easier to ride-share, take transit, walk, or bike. [R]
- Support the City’s bicycle and pedestrian programs. [G,B,I,R]
- Work with community groups to promote walking and biking for health. [G, R]

Short and medium-term

- Lobby for additional federal and state transit funding. [G,B,I,R]
- Work with other communities to create new MBTA services, including an Orange Line stop at Assembly Square, Somerville; a Green Line extension from Lechmere to Medford, and the Urban Ring line. [G,B,I,R]
- Lobby for low-emissions buses. [G,B,I,R]
- Encourage state and federal elected officials to shift federal funds from high ways to transit. [G,B,I,R]

Medium-term

- Establish a “walking bus” program in 3 schools. [G,R]
- Participate in an anti-idling campaign. Do education about idling through signs, targeted mailings to schools, parents, bus companies, shipping destinations. [G, R]
- Work with the city's congressional delegation to advocate for higher CAFE standards. [G,R]
- Work with state agencies to develop a system to more closely tie vehicle insurance costs to vehicle miles traveled. [G,R]

Long-term

- Establish car-free celebrations in Cambridge. [B,R]
- Switch to alternative fuel and minimum-sized vehicles. [R]
- Encourage federal and state officials to begin planning an interstate transportation system that does not include large trucks on roadways other than limited access highways. [G,B,I,R]

Land Use, Buildings, and Vegetation Management

Short-term

- Design and construct durable buildings that meet LEED standards and have flexible re-use options. [G,I,B,R]

Medium-term

- Reuse materials from existing structures during renovation or redevelopment projects (See LEED Materials Credit 1). [G,I,B,R]
- Become involved in regional land use planning activities. [G,B,I,R]
- Incorporate LEED standards for reflectance and shading in all City and private parking lots and in new construction and major renovations. [G,B,I,R]

Waste Management

Short-term

- Initiate and support waste prevention measures in the residential and other sectors. [G,B,I,R]